Explanation of the problems in using IO extender 8AIIX

We are monitoring power generated from 9 small wind turbines located at different location.

Each of the output voltage and current is measured by current and voltage sensors which have the output of 4-20mA. Finally they are connected to AI-8 of two IO Extenders 8AIIX. The input current range is 0-2A and the input range is 0-12V. If the setting and connections are correct then we should be getting the range of input 4-20mA = 0-2A or = 0-12V. (the 4 can be obtained by setting ON the dip switch)

However, our initial setting has resulted in 5 digits reading. In the absence of user manuals and after several trial and errors, we still failed to obtain the right input values.

Strangely if any of the sensor output connected to AI of Netbiter Easyconnect E300, the reading is between 4-20mA.

Q1. How to set input A1-8 to read 0-20mA on IO 8AIIX

As there is no instruction available can you please guide to set the input to read 0-20mA.

Yes you did explain in your email how to do this by converting 0-4096 according. Our questions are as below

- 1. Why we need to set the input type to 0-4096 then convert it to 0-20Ma
- 2. Even by setting the input to 0-4096, our readings obtained seem incorrect, because when the turbine is not spinning the reading should be = 0

1		Edit parameter	
	Name *	AI_type	
	Unit		
_	Туре	Holding	-
Hadhaa type: 14	Address *	101 Dec: 101 Hear Patz	
Photos (geo: Pr	Datatype	16 bit value	*
_	Scaling *	1	
	Offset *	0	
	Group	Туре	×
	Presentation *	Read/Write value with enumeration	*
	Enumeration	0=not set;1=0-4095;2=0-20.000;3	-+/ 58
	Number of decimals	2	
	Mesk	Disable mask > 0x]
	Valid range	-	-

Figure 1 How to set these parameters. We expect minimum changes. Do we need to specify all parameters? What are their meanings?

Q2 What are bit 1 and bit2 and where are they located

From figure 2, we are trying to hard to figure out what and where these bits are?

Where is bit1 and where is bit2. Please refer to figures below

A.Common	and the second second second			1110000	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
3 Nettoter	EasyConnect 80300 sens					
GPS						
B My DC P	hower Monitor device					
Netfitter	1/O Extender 6Ala					
E Analog	pinputs (WetBiter 1/O Excend	Ser SAD()				
C Ante	log Input 1			\$73		
[] Anal	log Diput 2			671		
D Anti	log Input 8			6		
E Anal	log Input 4			0		
C Anal	log input 5			0		
1 Arial	log linput fi			0		
E Anel	log Input 7			11		
Anel	log Enput II			7		
El Ires	it Status		(1364		
E Comm	unication (NetBiter 1/O Exte	nder BAIx)	_	\sim		
1 Inform	nation (NetSiter 1/O Extende	r #A[x]				
E Type (NetBiter I/O Extender BAb()		/			
Halling .	1/0 Extender BAls, 2		/			

Bit 1 and bit2 here ???? how to read this

Extender User Manual

HM5+27-228-EN 31

- Isolated Analog Current Inputs

36 (40

DIP Switch Settings

Switch	Function	Description
1-7	NODE ID	Mothus Node ID See Madhus Node ID Satting, p. 8
8	OFFRET	GN = inputs are soared to accept a 4 mA offset.
•	OUT OF RANGE	Out of range is given when the input is too negative or too positive. OFF = the analog value will be loaded with 32767 when aut of range. ON = the analog value will be loaded with 32768 when out of range.
8	BAUD RATE	OFF = 9800, ON = programmed. See Communication Settings. p. 8

Data Registers

è

Modbus Register	Register Name	Low	High	Access	Commants			
30001	S/W Version / Module Type	104	NG.	A	High Byte = Software Version Low byte = 102			
30002	Analog Input 1	0	4095	R				
30003	Analog Input 2	4	4095	8	1			
30004	Analog input 3	0	4095	8	1			
30005	Analog Input 4	0	4095	8				
30006	Analog Input 8	10	4095	H	reading inputs in class 12 bits.			
30007	Analog Input 6	0	4095	H.	1			
30008	Analog Input 7	1						
30009	Analog Input II	1	1004	-	and the second se			
80010	Wood Solution	0	65535	A .	bit 2 = 0 (open circuit (# <2)) bit 2 = 1 (over range) bit 1 = 0 (CK) bit 1 = 1 (error)			
30100	OP Switch	0	65535	8	Blatus of DIP Switch on Front Panel			
The second second	and some international	-		ALC: N	State of the local distance of the local dis			
-	1 June	1.0.00	11000	10 AAU	B100 1800 5600 10000			
autal.	Cast rate	2400	11520	10.00	38400,57800,115200			
40122	Parity	0	2	RAW	0 = none. 1 = even. 2 = odd			
	These Pains	1.4		20AM	A set in address that IT as IT address chains			
40123	0400-1940	1.4		10.00	1 - 1 such ov. n - n web out			

Analog Input Registers

The analog inputs are read as a 12 bit value in the registers as follows:

MSB IOX-BAIS Analog Inputs LSB										58	10000					
-15	14	10	12	11	10			7	4	- 16	4	1.2	2	1	13	WIRDINGS.
32768	16384	8102	4096	2048	1224	512	256	128	64	32	16		4	2	1	300av
-	-	-	-								۰.				.4	
						Analo	g triput	12 M	t vai	ie (5	-409	49				

Zakaria 3/5/2020